

# **SINGAPORE CIVIL DEFENCE FORCE**

## **GUIDELINES ON ARSON PREVENTION PLAN**

### **OBJECTIVE**

The occurrence of arson can be reduced and its effects controlled if consideration is given in advance to identify potential threats and ensure effective protection measures. Arson Prevention Plan (APP) is to document the fire safety management system to safeguard the building's fire safety system against security threats arising from arson attacks.

### **APPROACH**

2 Fire Safety Manager is to assist building management to perform the role of fire safety management, ensuring that people living, working and anyone occupying the premises are safe from the ravages of fires. This includes taking steps in a structured way to safeguard possible destruction /sabotage to the building due to fires. Based on these guidelines on the APP, the FSMs of the various buildings will be required to draw up the APP for their respective buildings. The APP will form part of the annual Fire Safety Report for their buildings.

3 There is a need for co-ordinated effort of FSM and the building security in the preparation of an APP. However, it should be noted that an APP should not duplicate security issues under the security purview. It should focus more on areas where damages inflicted on the buildings would have immediate and direct impact on the building's ability to protect its occupant in the event of fire emergency.

### **PREPARATION**

- 4 The following should be included in the preparation and write-up of the APP:
- a. Arson Risk Assessment
  - b. Fire Safety Management Procedures
  - c. Risk Reduction Measures
  - d. Implementation

## **EXPLANTORY NOTES FOR THE CONTENTS OF THE PLAN**

### **Arson Risk Assessment**

5 There are many ways in which an arson risk assessment may be carried out. The main consideration is that features relating to the occurrence of arson are considered in a logical and structured way. The risk assessment should be recorded and reviewed. An arson risk assessment model will include the following elements:

#### **a. Identification of Critical Locations of Fire Safety Systems**

Study the building to identify the critical locations of fire safety systems that vulnerable to acts of sabotage and explore safety and risk reduction features for the protection of these critical locations. example, look at the accessibility of breeching inlets of sprinkler and rising mains, control valves of sprinkler, landing valves of rising mains, hydrant, pump and motor room, FCC , etc. These will be the potential targets of sabotage activities if they are easily accessible to the public.

#### **b. Identification of the Fire Hazards**

Identify, and reduce as far as is practical, the source of ignition and combustible materials that are available to the potential arsonist. Example of these could include waste materials accumulated anywhere in the premises, improper storage of hazardous substances, indiscriminate dumping of building materials for the renovations works , placement of discarded items on passage ways/ staircases, etc.

#### **c. Checks on Adequacy of Existing Security Measures**

Effective security measures make a positive contribution to reducing the threat of an arson attack. Example of the security measures that could be assessed include access control to prevent illegal entry to sensitive, isolated or seldom used parts of the premises, access control to the fire safety installations, monitoring of the movement of fire hazardous materials delivered by an external party, fire safety surveillance 's programme, installation of security lighting, security fence, CCTV , etc. These security measures would serve as prevention and deterrence to potential attackers that the fire safety systems are under observation.

#### **d. Scenario Planning**

Conduct Scenario planning for act of sabotage to the fire safety systems that are likely to occur based on the nature of business and activities conducted in the building and recommend measures to handle such situations. Identification of the anticipated problems that may arise from the scenarios that may vary depending on the building's event calendar. Examples of these could include

possible activities of destruction or sabotage, how to better manage fire hazards in such situation, what measures to take in enhancing the protection of the building's fire safety systems etc.

### **Fire Safety Management Procedures**

6 Effective procedures for fire safety in the building would reduce the likelihood of arson attack and serve to protect the life safety of the occupants from such incidents. The following could be included in this subject:

#### **a. Inspection Procedures Of Fire Safety Systems**

Lay down the routine inspection programme of fire safety works including the performance test of the systems and checking on the security aspect of the systems and rectification works. Examples of these would include physical checks on the control valves of sprinkler to ensure that they are in open position, landing valves of rising mains are strapped and locked, breeching inlets of sprinkler and rising mains are protected against vandalism, etc.

#### **b. Fire Safety Housekeeping**

Establish the fire safety housekeeping programme for the building. Examples of these would include the inspection on fire doors to ensure that they are properly closed, duct risers are properly fire stopped, storage at common areas are removed, hazardous substances are properly kept, no obstruction to passageways /staircases from discarded items, etc.

#### **c. Education And Training**

Occupants should be given training to the danger of arson and importance of arson prevention. This would outline the management of fire safety preparedness implemented for the building such as action to be taken in the event of fire, control of combustible materials and awareness of the threat of arson and consequences of an arson attack, etc.

### **Risk Reduction Measures**

7 This would outline the risk reduction measures for each of the risk factor that was identified during a risk assessment process. Examples of these could include -

(1) **Reduce the opportunity to start a fire.** To consider the construction of a proper store to keep flammable materials and hazardous substances, refuse/construction building materials to be cleared daily, stepping up fire safety surveillance, installation of CCTV, security lighting, etc.

(2) **Reduce losses and disruption resulting from a fire.** To step up inspection on the landing vales of rising mains, sprinkler control valves and fire safety surveillane on the motor room / fire pump room, etc.

### **Implementation**

8 This would include the action plan and timeframe for the implementation of the measures.

### **Format**

9 The format of the APP is given as per Annex A.

### **CONSLUION**

10. The guidelines are meant to help the FSMs to develop the APP for their respective buildings. The FSM may expand or modify the contents of the APP to suit the specific characteristics pertaining to his building.

**Annex A**

**FIRE SAFETY MANAGER (FSM) ANNUAL REPORT TO OWNER**

**INFORMATION**

Building Name		No. of Storeys	
Owner's Name		Tel. No.	
FSM's Name		Tel. No	
Building Address		Occupant Load	
Correspondence Address (if different from above)		Gross Floor Area	

**PERIOD OF REPORT**

Date	Month	Year	TO	Date	Month	Year

## DETAILS OF ANNUAL REPORT

1. TRAINING
  - 1.1. IN-HOUSE FIRE FIGHTING/FIRST-AID TRAINING

Training For:	Date		Brief Description of Training	No. of Participants
	From/On	To		
Occupants/ Tenants				
Fire Wardens				
Management/ Staff				
In-House Fire Fighting Team				









## 8. ARSON PREVENTION PLAN (APP)

(The Guidelines are meant to help the FSMs to develop the APP for their respective buildings. The FSM may expand or modify the contents of the APP to suit the specific characteristics pertaining to his building.)

A.	<b>ARSON RISK ASSESSMENT</b>
1)	Identification Of Critical Locations Of Fire Safety Systems
2)	Identification Of The Fire Hazards
3)	Checks On Adequacy Of Existing Security Measures
4)	Scenario Planning

<b>B.</b>	<b>FIRE SAFETY MANAGEMENT PROCEDURES</b>
1)	Inspection Procedures Of Fire Safety Systems
2)	Fire Safety Housekeeping
3)	Education And Training

<b>C.</b>	<b>RISK REDUCTION MEASURES</b> Outlined risk reduction measures for each risk factor identified during risk assessment process. Example: - Measures to reduce the opportunity to start a fire. - Measures to reduce losses and disruption resulting from a fire.
1)	
2)	
3)	

<b>D.</b>	<b>IMPLEMENTATION</b>
1)	Implementation Plan
2)	Timeframe

## ACTIONS BY BUILDING OWNER

REPORT SUBMITTED BY:

*Name of FSM:* \_\_\_\_\_

*Signature of FSM:* \_\_\_\_\_

*Date:* \_\_\_\_\_

REPORT COUNTERSIGNED BY:

*Name of Owner:* \_\_\_\_\_

*Signature of Owner:* \_\_\_\_\_

*Date:* \_\_\_\_\_

***THIS REPORT MUST BE SUBMITTED TO THE BUILDING OWNER/OCCUPIER ON AN ANNUAL BASIS,  
AS REQUIRED UNDER THE FIRE SAFETY (FSMs) REGULATIONS 1994. THE BUILDING  
OWNER/OCCUPIER SHALL PRODUCE THE REPORT AT ANY TIME WHEN REQUESTED BY SCDF***